

**PRECO**<sup>TM</sup>  
ELECTRONICS

PreView® Display  
CD6102 / CD6102 OC / CD6102-2  
Operating Manual



**PATENTS**

Patented under one or more of the following U.S. Patents:

5345471, 5523760, 5457394, 5465094, 5512834, 5521600, 5682164, 5630216, 5510800, 5661490, 5609059, 5774091, 5757320, 5581256, 5832772, 5519400, 5767953, 5767627, 5589838, 5563605, 5661385, 5517198, 5610611, 5883591, 5805110, 5754144, 7088284, and 7215278.

Other patents have been applied for.

**TRADEMARKS**

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## Operator Display Description

**CD6102** – the CD6102 operator display family is a Common Display used with all the PreView CAN based sensors. This display provides the vehicle operator with a visual indication of a detected object. The display unit also contains a buzzer to provide an audible alert that will increase in rate as an object becomes closer, providing the operator with another cue that an object is being detected.

A switch is provided on the front panel of the display allowing the vehicle operator the ability to adjust the buzzer volume to three different levels or to provide an alarm acknowledge and silence the buzzer.

**CD6102-2** – is a CD6102 display factory configured for a two sensor PreView system.

**CD6102 OC** – is a sealed display for an open cab application. The display provides the vehicle operator with a visual indication of a detected object. This display does not contain a buzzer for audible alert or a switch to adjust the volume.

The operator display continuously monitors communication from the PreView sensor and in the event of a system failure or malfunction, will notify the operator with a fault indication.

The PreView® system is a blind spot collision warning system designed to supplement other safety practices and/or devices. The machine operator is always the first line of defense when safely operating a vehicle.



## Display Unit Function

Range Indications  
5 Zones

Display Buzzer\*

LED #1

LED #5

Status LED

Volume Control/  
Ack Switch\*



Figure 1. PreView® Operator Display

Item	Description
Status LED	Illuminates green continuously after power is applied to the system. The status will change from green to red if a system malfunction occurs.
Range Indications	Illuminates to give operator a relative distance measurement to the closest detected object. LED's operate from the left to right, with a closer object resulting in more LED's illuminated.
Display Buzzer*	Sounds audible tones to alert operator of obstacles. The speaker pulse rate will increase as the vehicle gets closer to an object.
Volume Control/Ack Switch	This momentary push button switch allows three different buzzer volume levels to be selected. It can also be configured as an acknowledge switch to silence the buzzer using the Service Tool.

Table 1. Operator Display Description

\*CD6102 OC display does not contain a buzzer or Volume Control / Ack Switch

## Mounting Instructions

### Display Unit Installation

The display unit should be mounted where the vehicle operator can easily view it while backing. The ideal location for this is on the dash positioned by either windshield pillar. This will allow the operator view of the display while also looking out one of the side mirrors.

The PreView display unit comes equipped with a mounting bracket and hardware. If desired, the display unit can be mounted to the display bracket with the supplied hardware. This bracket can then be mounted in the vehicle cab as desired. The display receives power from the sensor. See installation guide and supplied manuals for more information.



## Troubleshooting

### Display Status LED is not illuminated:

- Verify that DC power (9-33V) is applied to the sensor.
- Verify that the cable between the sensor and display is connected.

### Display Status LED is RED:

- Check connection between display and sensor.

### Display Status LED is RED and one Yellow LED is illuminated:

LED Error Code	Possible Reason
LED #5 on	No communication with any sensor(s)
LED #4 on	Built in Self Test Error – Contact Factory
LED #3 on	Missing sensor(s)

### All the display LED's are illuminated when sensor is mounted:

- Verify the sensor is pointing outward from the vehicle in an open area with no obstructions. This may require removing the mounting screws and lifting the sensor out away from the rear of the vehicle. If the display LED's are not active when moved away from the vehicle, but are active when mounted, then the sensors mounting position will have to be moved.

### Sensor is detecting the ground, indicated by a few of the display LED's being lit:

- In an open field, either move the sensor up higher or slightly angle the sensor upward 5 to 10 degrees. The minimum recommended mounting height is 24 inches.

**For Questions call Preco Electronics, Inc™ 1-866-977-7326 between 7:30 AM and 4:30 PM Mountain Standard Time**



## Specifications

### DISPLAY SPECIFICATIONS (Typical)

Housing Material: Polycarbonate/ABS alloy  
 Dimensions: 1.00"H x 2.25"W x 2.00"D (2.5cm x 5.7cm x 5.1cm)  
 Weight: 0.25 lb. (0.11 kg)  
 Mounting: User dependent

### ELECTRICAL SPECIFICATIONS

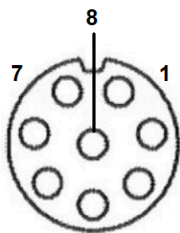
Power supplied by sensor

### OPERATING CHARACTERISTICS

Warning Ranges: 5 zones

### COMMUNICATION

Physical Layer: CAN 2.0B, 250 KB/s  
 Protocol Layer: SAE J1939 Extended  
 Data Update Rate: 70 ms



**MATING END VIEW**

CONNECTOR PIN OUT	
PIN	SIGNAL NAME
1	CAN HIGH
2	CAN LOW
3	-
4	-
5	POWER
6	GROUND
7	-
8	-

Figure 2. Mating End View and Connector Pin Out

**PRODUCT MANUFACTURED IN THE USA**



## Warranty Information

### MANUFACTURER STANDARD LIMITED WARRANTY AND LIMITATION OF LIABILITY

Manufacturer warrants that on the Date of Purchase this Product will conform to Manufacturer's published specifications for the product, which are available from Manufacturer on request, and Manufacturer warrants that the product is free from defects in materials and workmanship. This Limited Warranty for the Display extends for sixty (60) months from the date of shipment. Manufacturer will, at its option, repair or replace any product found by Manufacturer to be defective and subject to this Limited Warranty.

This Limited Warranty does not apply to parts or products that are misused; abused; modified; damaged by accident, fire or other hazard; improperly installed or operated; or not maintained in accordance with the maintenance procedures set forth in Manufacturer's Installation and Operating Instructions.

To obtain warranty service, you must ship the product(s) to the specified Manufacture location within thirty (30) days from expiration of the warranty period. To obtain warranty service you must call Preco Customer Service at 866-977-7236 or 208-323-1000, or fax your request to 208-323-1034. Customer Service will issue warranty authorization and further instructions. You must prepay shipping charges and use the original shipping container or equivalent.

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Any oral statements or representations about the product, which may have been made by salesmen or Manufacturer representatives, do not constitute warranties. This Limited Warranty may not be amended, modified or enlarged, except by a written agreement signed by an authorized official of Manufacturer that expressly refers to this Limited Warranty.





## PreView® Add-On Options

**PreView® Plus Camera / Monitor System** – Ultimate safety and object detection system configurable with up to 4 cameras and 24 sensors.

**PreView Safety Alert System** – The PreView Radar Sensor detects an object in the blind spot. Once the object is detected, PreView triggers the back-up alarm to either increase the sound of the alarm OR change the beep rate to alert pedestrians outside of the vehicle of the danger.



## This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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